

3. Remarks

35 U.S.C. §112, first and second paragraph

Claim 18 stands rejected under 35 U.S.C. §112, first and second paragraph. In response, claim 18 has been amended to read: An isolated antibody, comprising an antibody that specifically binds to a polypeptide comprising SEQ ID NO:2," as suggested by the Examiner. Applicants submit that the present claims, as amended, fully satisfy the requirements of enablement and definiteness and ask that the rejections be withdrawn.

35 U.S.C. §102

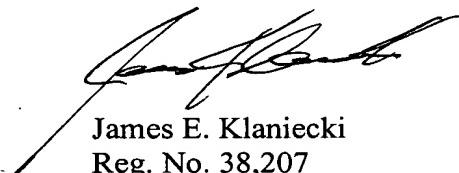
Claims 18-20 stand rejected under 35 U.S.C. §102(e1) and (e2) as being anticipated by U.S. Patent Appln. Pub. No. 2002/0198147 and USPN 6,642,360, respectively. The Examiner states that the prior art teaches antibodies that bind to the PRO355 polypeptide (SEQ ID NO:61), which shares 99.1% identity with Applicants' SEQ ID NO:2. The Examiner notes that Applicants' SEQ ID NO:4 shares 97.8% identity with the PRO355 protein sequence. Based on the percent identity between Applicants' protein sequences and the PRO355 sequence, the Examiner believes that the antibodies taught in the prior art (and claimed in U.S. Patent Appln. Pub. No. 2002/0198147) are the same antibodies that Applicants are now claiming. Applicants respectfully disagree.

Applicants submit that USPN 6,642,360 and U.S. Patent Appln. Pub. No. 2002/0198147 are not prior art because Applicants' date of invention antedates the earliest effective filing date of the references. As evidence, Applicants submit the enclosed Declaration under 37 CFR 1.131, which shows that Applicants were in possession of the SEQ ID NO:2 and 4 prior to December 3, 1997, which is prior to the earliest effective filing date for either of the cited references. Consequently, USPN 6,642,360 is not prior art and the rejection under 35 U.S.C. §102(e2) may be properly withdrawn.

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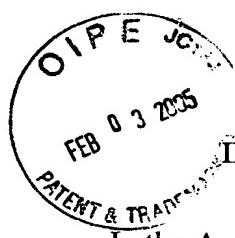
As to the rejection under 35 U.S.C. §102(e) that U.S. Patent Appln. Pub. No. 2002/0198147 anticipates the present claims, Applicants reiterate that U.S. Patent Appln. Pub. No. 2002/0198147 is not prior art to the present application because Applicants' date of invention is prior to the earliest effective filing date of the reference (*i.e.*, December 3, 1997). Applicants wish to alert the Examiner that they will be initiating Interference proceedings against the cited reference in the near future.

Respectfully submitted,



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Date: January 28, 2005

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Law Department/JEK
1201 Amgen Court West
Seattle, WA 98119-3105
Telephone (206) 265-7000



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Attorney Docket No.: 2873-US

Peter Robert Baum and William Christian Fanslow III

Serial No.: 09/778,187

Group Art Unit: 1644

Filed: February 06, 2001

Examiner: Roark, J. H.

For: MOLECULES DESIGNATED LDCAM

DECLARATION UNDER 37 C.F.R. §1.131

Commissioner of Patents
P. O. Box 1450
Alexandria VA, 22313-1450

COPY

Sir:

We, the undersigned, hereby declare that:

1. We are the same Peter Robert Baum and William Christian Fanslow III named as co-inventors on the above-identified application. Prior to December 03, 1997, a nucleic acid encoding human LDCAM was isolated, the sequence of said nucleic acid was determined, and the amino acid sequence encoded by said nucleic acid was deduced, in the United States of America by us, the co-inventors named in the subject application, as evidenced by the Exhibit enclosed herewith.

2. The nucleic acid and amino acid sequence data presented in the Exhibit were obtained and the works that generated those data were completed in this country prior to December 03, 1997. The amino acid sequence presented in the Exhibit (HuB7L1-CoR) is identical to SEQ ID NO: 2 of the instant application, which is the amino acid sequence of human LDCAM.

3. We therefore submit that this showing of facts is sufficient in character and weight as to establish that the invention of this application was reduced to practice prior to December 03, 1997, the earliest possible 102(e) date of the cited publication, U.S. Patent Application Publication US 2002/0198147 A1.

4. We further declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both,

under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

5.22.03

Peter Robert Baum

Date

Peter Robert Baum

5-23-03

William Christian Fanslow III

Date

William Christian Fanslow III

HuB7L1-CoR Full Length

(Linear) (Six Base) MAP of: 4469-Wi26.Seq check: 1995 from: 1 to: 1535
[hollingsworth.cncdna.4469]

req 4469 HuB7L1 counterstructure Wi26 pool314-28#34 FINAL SEQUENCE FILE
3mGel1648, #7046, #5080 / 3mGel1663 dpc7266,67 / 2mGel1671 dpc7305,6
4469-wi26

B B
ENXs B aX
aomi c mh
etaE g Ho
1131 l 12
// Sal-22778 → /
GCGGCCGCGCCCGACATGGCGAGTGTAGTGCTGCCGAGCGGATCCCAGTGTGC GGCGCA
1 -----+-----+-----+-----+-----+-----+-----+ 60
CGCCGGCGCGGCTGTACCGCTCACATCACGACGGCTCGCCTAGGGTCACACGCCGCCGT
a M A S V V L P S G S Q C A A A -

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S
N B B p
S BsKNH AsBSX B1 ES D
P aaaaa vrgmm a2 aa s
B nHsre aFlaa n8 rp a
2 11112 11111 26 11 1
// // /
GCGGCCGCGCCGCCCTCCGGGCTCCGGCTCCGGCTCTGCTGTTGCTCTTCTCCGCC
61 -----+-----+-----+-----+-----+-----+-----+ 120
CGCCGCCGCCGCCGCCGGAGGGCCCGAGGCCGAGGCCGAAGACGACAACGAGAAAGAGGCCG
a A A A A A P P G L R L R L L L L F S A -

N A
ss 1
ps w
Bt N
22 1
GCGGCACTGATCCCCACAGGTGATGGGCAGAACATCTGTTACGAAAGACGTGACAGTGATC
121 -----+-----+-----+-----+-----+-----+-----+ 180
CGCCGTGACTAGGGGTGTCACACTACCGTCTTAGACAAATGCTTCTGCACTGTCACTAG
a A A L I P T G D G Q N L F T K D V T V I -
Signal seq. ^
GAGGGAGAGGTTGCGACCATCAGTTGCCAAGTCAATAAGAGTGACGACTCTGTGATTCA
181 -----+-----+-----+-----+-----+-----+-----+ 240
CTCCCTCTCCAACGCTGGTAGTCACGGTTCAAGTTATTCTCACTGCTGAGACACTAAGTC
a E G E V A T I S C Q V N K S D D S V I Q -

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 C T A C T G A A T C C C A A C A G G C A G A C C A T T T A T T C A G G G A C T T C A G G C C T T G A A G G A C A G C
 241 L L N P N R Q T I Y F R D F R P L K D S -

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 #30518 (7A) →
 A G G T T C A G T T G C T G A A T T T C T A G C A G T G A A C T C A A A G T A T C A T T G A C A A A C G T C T C A
 301 T C C A A A G T C A A C G A C T T A A A A G A T C G T C A C T T G A G T T C A T A G T A A C T G T T G C A G A G T
 R F Q L L N F S S S E L K V S L T N V S -

 #30509 (1A/6A) → #30516
 A T T T C T G A A G G A A G A T A C T T T G C C A G C T C T A T A C C G A T C C C C C A C A G G A A A G T T A C
 361 T A A A G A C T A C T C C T T C T A T G A A A C C G G T C G A G A T A T G G C T A G G G G G T G C C T T C A A T G
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 421 T G G T G G T A G T G T C A G G A C C A G G G T G G T G C A T T A G A C T A C T A G C T A T A G G T C T T C T G T G A
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 #30514 (4A) →
 G C G G T G G A A G G T G A G G A G A T T G A A G T C A A C T G C A C T G C T A T G G C C A G C A A G C C A G C C A C G
 481 C G C C A C C T C C A C T C C T C T A A C T T C A G T T G A C G T G A C G A T A C C G G T C G T C G G T C G G T G C
 A V E G E E I E V N C T A M A S K P A T -

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 A C T A T C A G G T G G T C A A A G G G A A C A C A G A G C T A A A A G G C A A A T C G G A G G T G G A A G A G T G G
 541 T G A T A G T C C A C C A A G T T C C C T T G T G T C G A T T T C C G T T A G C C T C C A C C T T C T C A C C
 #30517 (5B/6B/7B) - 600

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TCAGACATGTACACTGTGACCAGTCAGCTGATGCTGAAGGTGCACAAGGAGGACGATGGG
601 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 660
AGTCTGTACATGTGACACTGGTCAGTCGACTACGACTTCCACGTGTTCTCCTGCTACCC
a S D M Y T V T S Q L M L K V H K E D D G -

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GTCCCAGTGATCTGCCAGGTGGAGCACCCCTGCGGTCACTGGAAACCTGCAGACCCAGCGG
661 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 720
CAGGGTCACTAGACGGTCCACCTCGTGGGACGCCAGTGACCTTTGGACGTCTGGGTCGCC
a V P V I C Q V E H P A V T G N L Q T Q R -

															B						
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TATCTAGAAGTACAGTATAAGCCTCAAGTGACATTAGATGACTTATCCTCTACAAGGC
721 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 780
ATAGATCTTCATGTCATATTGGAGTTCACGTGTAAGTCTACTGAATAGGAGATGTTCCG
a Y L E V Q Y K P Q V H I Q M T Y P L Q G -

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TTAACCCGGGAAGGGGACCGCGTTGAGTTAACATGTGAAGCCATCGGAAGCCCCAGCCT
781 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 840
AATTGGGCCCTTCCCTGCGCGAACTCAATTGTACACTTCGGTAGCCCTTCGGGGTCGGA

a L T R E G D A L E L T C E A I G K P Q P -
 GTGATGGTAACCTGGGTGAGAGTCGATGATGAAATGCCCTAACACGCCGTACTGTCTGGG
 841 -----+-----+-----+-----+-----+-----+-----+ 900
 CACTACCATTGAACCCACTCTCAGCTACTACTTACGGAGTTGCGGCATGACAGACCC
 a V M V T W V R V D D E M P Q H A V L S G -
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 an8 p n
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 CCCAACCTGTTCATCAATAACCTAAACAAAACAGATAATGGTACATACCGCTGTGAAGCT
 901 -----+-----+-----+-----+-----+-----+-----+ 960
 GGGTTGGACAAGTAGTTATTGGATTGTTGTCTATTACCATGTATGGCGACACTTCGA-
 (-ggatatcactcagcataatgtata t7 Promoter)
 a P N L F I N N L N K T D N G T Y R C E A -
 41-mr 33713

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#30511 (2A/3A) → 11
 TCAAACATAGGGGAAAGCTCACTCGGATTATATGCTGTATGATACGATCCCCCACA
 961 -----+-----+-----+-----+-----+-----+-----+ 1020
 AGTTTGTATCACCCCTTCGAGTGAGCCTAATATACGACATACATATGCTAGGGGGTGT
 a S N I V G K A H S D Y M L Y V Y D P P T -
 ACTATCCCTCCCTCCCACAACAACCACCACCAACCACCAACCACCATCCTT
 1021 -----+-----+-----+-----+-----+-----+-----+ 1080
 TGATAGGGAGGAGGGTGTGTTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTAGGAA
 a T I P P P T T T T T T T T T T T T T T T I L -
 ← #30512 (2B)

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 1081 ACCATCATCACAGATTCCCGAGCAGGTGAAGAAGGCTCGATCAGGGCAGTGGATCATGCC
 -----+-----+-----+-----+-----+-----+-----+ 1140
 TGGTAGTAGTGTCTAAGGGCTCGTCCACTTCTCCGAGCTAGTCCCGTCACCTAGTACGG
 ← ← #30513 (3B)

a T I I T D S R A G E E G S I R A V D H A -
 B T
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 H 3
 1 2

GTGATCGGTGGCGTCGTGGCGGTGGTGGTGGCTGCCATGCTGTGCTCATCATTCTG
 1141 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 1200
 CACTAGCCACCGCAGCACCGCCACCACAAAGCGGTACGACACCGAACGAGTAGTAAGAC
 a V I G G V V A V V V F A M L C L L I I L -
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 GGGCGCTATTTGCCAGACATAAAGGTACATACTCACTCATGAAGCCAAGGAGCCGAT
 1201 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 1260
 CCCCGATAAAACGGTCTGTATTCATGTATGAAGTGAGTACTTCGGTTCTCGGCTA
 a G R Y F A R H K G T Y F T H E A K G A D -
 GACGCAGCAGACGCAGACACAGCTATAATCAATGCAGAAGGAGGACAGAACACTCCGAA
 1261 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 1320
 CTGCGTCTGCGTCTGTGTCGATATTAGTTACGTCTCCTCCTGTCTTGTGAGGCTT
 a D A A D A D T A I I N A E G G Q N N S E -
 ← #30510 (1B)
 S X
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 GAAAAGAAAGAGTACTTCATCTAGATCAGCCTTTGTTCAATGAGGTGTCCAAGTGGC
 1321 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 1380
 CTTTCTTCATGAAGTAGATCTAGTCGGAAAAACAAAGTTACTCCACAGGTTGACCG
 a E K K E Y F I *

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 CCTATTAGATGATAAGAGACAGTGTATGGAACTTGCAGAGAAATCGTGTGTTTT
 1381 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 1440
 GGATAAACTACTATTCCTCTGTCACTATAACCTTGAACGCTCTTAAGCACACAAAAAA

TATGAATGGGTGGAAAGGTGTGAGACTGGAAAGGCTGGGATTTGCTGTGTAAAAAAA
 1441 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 1500
 ATACTTACCCACCTTCCACACTCTGACCCCTCCGAACCTAAACGACACATTTTTTT

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AAAAAAATGTTCTTGAAAGAAAAAGCGGCCGC
1501 -----+-----+-----+----- 1535
TTTTTTACAAGAACCTTCCTTTTCGCCGGCG

Enzymes that do cut:

Acc1	Afl3	AlwN1	Apol	Apa1	ApaL1	Ava1	Bal1
BamH1	Ban1	Ban2	Bcg1	Bgl1	BsaA1	BsaB1	BsaH1
Bsg1	BsiE1	BsmB1	Bsp1286	BspH1	BspM1	BsrF1	BstZ171
Clal	Dra2	Drd1	Dsal	Eae1	Ear1	Eco571	EcoN1
EcoR5	Hae2	HgiA1	Hinc2	Hind3	Hpa1	Kas1	Nar1
Not1	NspB2	NspH1	PpuM1	PshA1	Pss1	Pst1	Pvu2
Sap1	Scal	Sfc1	Sma1	Sml1	Sst2	Stu1	Tth32
Xba1	Xcm1	Xho2	Xma1	Xma3			

Enzymes that do not cut:

Aat2	Acl1	Afl2	Age1	Ascl	Ase1	Asp718	Asu2
Avr2	Bbs1	BciV1	Bcl1	Bgl2	Bpu11021	Bpm1	Bsa1
BsiW1	Bsm1	BspE1	BssH2	BstE2	BstX1	Bsu361	Dra1
Dra3	Eam1105	Eco473	EcoR1	Fse1	Fsp1	Kpn1	Mlu1
Mun1	Ncol	Nde1	NgoM1	Nhe1	Nru1	Nsi1	Pac1
PflM1	Pme1	Pml1	Pvu1	Rsr2	Sal1	Sfi1	SgrA1
SnaB1	Spe1	Sph1	Srf1	Sse8387	Ssp1	Sst1	Sty1
Swal	Tth31	Xho1	Xmn1				

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